

LISTING OF THE CLAIMS

Claim 1 (Previously Presented): A method for testing an integrated circuit (IC) comprising:

- employing one of a plurality of input lines coupled to a processor to receive a test signal for the processor wherein the processor is positioned internally with the IC;

- employing one of a plurality of output lines coupled to a processor to send a test result from the processor wherein the processor is positioned internally with the IC; and

- if the test result is unsuccessful, performing at least one of:

 - selecting and automatically switching to a remaining one of the plurality of input lines to receive the test signal for the processor using a first selection signal; and

 - selecting and automatically switching to a remaining one of the plurality of output lines to send the test result from the processor using a second selection signal.

Claim 2 (Original): The method of claim 1 wherein employing one of the plurality of input lines to receive the test signal for the processor includes:

- applying the test signal to each of the plurality of input lines;

 - selecting one of the plurality of input lines; and

 - receiving the test signal for the processor from the selected input line.

Claim 3 (Original): The method of claim 1 wherein employing one of the plurality of output lines to send the test result from the processor includes:

- applying the test result to each of the plurality of output lines;

selecting one of the plurality of output lines; and
sending the test result from the processor using the
selected output line.

Claim 4 (Original): The method of claim 1 wherein employing a
remaining one of the plurality of input lines to receive the test
signal for the processor includes:

selecting a remaining one of the plurality of input
lines; and

employing the selected remaining one of the plurality
of input lines to receive the test signal.

Claim 5 (Previously Canceled)

Claim 6 (Original): The method of claim 1 wherein employing a
remaining one of the plurality of output lines to send the test
result from the processor includes:

selecting a remaining one of the plurality of output
lines; and

employing the selected remaining one of the plurality
of output lines to send the test result from the processor.

Claim 7 (Previously Canceled)

Claim 8 (Original): The method of claim 1 wherein:

employing a remaining one of the plurality of input
lines to receive the test signal for the processor includes:

selecting a remaining one of the plurality of input
lines; and

employing the selected remaining one of the plurality
of input lines to receive the test signal; and

employing a remaining one of the plurality of output
lines to send the test result from the processor includes:

selecting a remaining one of the plurality of output lines; and

employing the selected remaining one of the plurality of output lines to send the test result from the processor.

Claim 9 (Original): The method of claim 8 wherein:

selecting a remaining one of the plurality of input lines includes:

modifying a first select signal; and

selecting a remaining one of the plurality of input lines based on the modified first select signal; and

selecting a remaining one of the plurality of output lines includes:

modifying a second select signal; and

selecting a remaining one of the plurality of output lines based on the modified second select signal.

Claim 10 (Previously Presented): An apparatus for testing an IC comprising:

a processor within the IC;

a plurality of input lines coupled to the processor positioned internally within the IC;

a plurality of output lines coupled to the processor positioned internal within the IC; and

a connector interface coupled to the plurality of input lines and the plurality of output lines;

wherein the apparatus is adapted to:

employ one of the plurality of input lines to receive a test signal for the processor;

employ one of the plurality of output lines to send a test result from the processor; and

if the test result is unsuccessful, perform at least one of:

selecting and automatically switching to a remaining one of the plurality of input lines to receive the test signal for the processor using a first selection signal; and selecting and automatically switching to a remaining one of the plurality of output lines to send the test result from the processor using a second selection signal.

Claim 11 (Original): The apparatus of claim 10 wherein the connector interface is adapted to apply the test signal to each of the plurality of input lines; and

further comprising a first multiplexer coupled to the plurality of input lines and the processor, and adapted to: select one of the plurality of input lines; and receive the test signal for the processor on the selected input line.

Claim 12 (Original): The apparatus of claim 11 wherein the first multiplexer is further adapted to:

select a remaining one of the plurality of input lines; and

employ the selected remaining one of the plurality of input lines to receive the test signal.

Claim 13 (Original): The apparatus of claim 11 further comprising a third multiplexer coupled to the connector interface and first multiplexer, and adapted to modify a first select signal, the first select signal corresponding to the first multiplexer; and

wherein the first multiplexer is further adapted to select a remaining one of the plurality of input lines based on the modified first select signal.

Claim 14 (Original): The apparatus of claim 10 wherein the processor is adapted to apply the test result to each of the plurality of output lines; and

further comprising a second multiplexer coupled to the plurality of output lines and the connector interface, and adapted to:

select one of the plurality of output lines; and
send the test result from the processor using the selected output line.

Claim 15 (Original): The apparatus of claim 14 wherein the second multiplexer is further adapted to:

select a remaining one of the plurality of output lines; and

employ the selected remaining one of the plurality of output lines to send the test result from the processor.

Claim 16 (Original): The apparatus of claim 15 further comprising a third multiplexer coupled to the connector interface and second multiplexer, and adapted to modify a second select signal, the second select signal corresponding to the second multiplexer; and

wherein the second multiplexer is further adapted to select a remaining one of the plurality of output lines based on the modified second select signal.

Claim 17 (Original): The apparatus of claim 10 wherein the connector interface is adapted to apply the test signal to each of the plurality of input lines; and

further comprising a first multiplexer coupled to the plurality of input lines and the processor, the first multiplexer adapted to:

select one of the plurality of input lines; and

receive the test signal for the processor from the selected input line;

wherein the processor is further adapted to apply the test result to each of the plurality of output lines; and

further comprising a second multiplexer coupled to the plurality of output lines and the connector interface, the second multiplexer adapted to:

select one of the plurality of output lines; and
send the test result from the processor using the selected output line.

Claim 18 (Original): The apparatus of claim 17 wherein:

the first multiplexer is further adapted to:

select a remaining one of the plurality of input lines;
and

employ the selected remaining one of the plurality of input lines to receive the test signal; and

the second multiplexer is further adapted to:

select a remaining one of the plurality of output lines; and

employ the selected remaining one of the plurality of output lines to send the test result from the processor.

Claim 19 (Original): The apparatus of claim 18 further comprising a third multiplexer coupled to the connector interface, first multiplexer and second multiplexer, and adapted to:

modify a first select signal, the first select signal corresponding to the first multiplexer; and

modify a second select signal, the second select signal corresponding to the second multiplexer; and

wherein the first multiplexer is further adapted to select a remaining one of the plurality of input lines based on the modified first select signal; and

wherein the second multiplexer is further adapted to select a remaining one of the plurality of output lines based on the modified second select signal.

Claim 20 (Original): The apparatus of claim 10 wherein the connector interface is adapted to couple to a service processor.